

Claims

- [1] A washing machine comprising:
an input unit for selecting a washing course;
a control unit controlling a washing cycle in a manner of detecting a laundry amount of a laundry according to the selected washing cycle and calculating and deciding data values necessary for washing according to the detected laundry amount or based on a predefined washing algorithm; and
a display unit displaying progress information of the washing cycle according to the selected washing course on a plurality of areas by dividing the progress information according to contents of the progress information.
- [2] The washing machine of claim 1, wherein the washing course inputted via the input unit is divided into a normal washing course using the predefined washing algorithm and a selective washing course using algorithm decided by calculating and deciding the data values necessary for the washing according to the detected laundry amount in the control unit.
- [3] The washing machine of claim 2, wherein in case of the selective washing course, the data values calculated according to the detected laundry amount by the control unit to be necessary for the washing include a washing water level, a washing time, a rinsing current and a washing current.
- [4] The washing machine of claim 1, the control unit comprising:
a laundry amount detecting unit calculating a washing water level and a washing time by detecting the laundry amount of the laundry; and
a display control unit displaying a selected course name, the display control unit controlling to display a washing water level and washing time message according to an announcement message or an operation result if the laundry amount detecting unit is activated.
- [5] The washing machine of claim 1, the display unit comprising:
a first display unit displaying the selected washing course; and
a second display unit displaying information necessary for a progress of the selected washing course.
- [6] The washing machine of claim 5, wherein the display unit is an LCD (liquid crystal display) configured on one panel and wherein each of the first and second display units is divided into a plurality of areas.
- [7] The washing machine of claim 6, wherein each of the first and second display units is divided into upper and lower double lines.
- [8] The washing machine of claim 5, wherein the first display unit displays a washing course and water temperature according to an external input or a

laundry amount detection result of the laundry and wherein the second display unit displays an announcement message according to the laundry amount detection or a washing time or washing water level according to an input of the input unit.

- [9] The washing machine of claim 1, the control unit further comprising an operation database (DB) storing algorithm for an operation control of the washing machine or data necessary for a washing course progress.
- [10] An operation control method of a washing machine, comprising the steps of:
 - inputting a washing course;
 - detecting a laundry amount according to a selected washing course if an operation execution command is inputted;
 - displaying a result message according to the detected laundry amount externally; and
 - controlling a washing cycle according to a laundry amount detection result and displaying information according to a progress of the washing cycle externally, wherein the externally displayed information is divided according to corresponding contents to be displayed on a plurality of areas, respectively.
- [11] The operation control method of claim 10, wherein an input of the washing course is divided into a normal washing course using predefined washing algorithm and a selective washing course using algorithm decided by calculating and deciding data values necessary for washing according to the laundry amount detection result.
- [12] The operation control method of claim 10, wherein in case of a normal washing course using predefined washing algorithm, the laundry amount detecting step and a corresponding data calculating step are not carried out.
- [13] The operation control method of claim 10, wherein in case of a selective washing course, an announcement message indicating the laundry amount is being detected is displayed from a time point of performing a laundry amount detection according to an input of an operation execution command to a time point of completing the laundry amount detection.
- [14] The operation control method of claim 13, wherein if the laundry amount detection is completed, information of a corresponding washing water level and a corresponding washing time is externally displayed.
- [15] The operation control method of claim 10, wherein information according to the selected washing course and a progress of the washing course is divided to be displayed on one LCD panel.
- [16] The operation control method of claim 15, wherein the divided information is displayed by upper and lower double lines.

- [17] The operation control method of claim 15, wherein a washing course and water temperature according to an external input or a laundry amount detection result of the laundry is displayed on one area and wherein an announcement message according to the laundry amount detection or a washing time or washing water level according to an input of the input unit is displayed on the other area.
- [18] The operation control method of claim 10, wherein in case of a normal washing course needing no laundry amount detection, the information according to a progress of the washing course is displayed using an operation database (DB) storing algorithm for an operation control of the washing machine or data necessary for the progress of the washing course.